

## Handicraft Hazards: Pottery Made at Home Can Be Very Harmful

Toxic Metals Used in Glazes  
Prove Lethal in Some Cases;  
A Radioactive Coffee Cup

By BARRY NEWMAN  
Staff Reporter of THE WALL STREET JOURNAL

Remember that adorable clay pitcher your neighbor's kid made for you at summer camp? It's perfect for keeping orange juice ice cold in the refrigerator. And once in a while you store stewed tomatoes or sauerkraut in it.

Here's a way to get even more enjoyment from that product of creative little hands: Get rid of it.

For unless you know precisely how that piece of crockery was made or have gone to the trouble and expense of getting it analyzed by a laboratory, the toxic metals in the glaze could be lethal. Glazes are the glass-like coatings fused at high heat to earthenware surfaces. They typically contain significant amounts of lead or other heavy metals that add color and speed the fusion process.

Commercial manufacturers of pottery tightly control the fusing time, thickness of the glaze and a number of other factors. Moreover, they constantly monitor their products and submit them to outside testing laboratories to make sure dangerous levels of lead aren't being released.

The problem is that the number of amateur potters is growing rapidly. The American Crafts Council, which calls ceramics the most popular craft, had 462 recognized pottery centers being taught around the U.S. That's twice the number of five years ago. And that only hints at the number of others who teach pottery on an informal basis to their families.

Anyone can make pottery at home for an investment of \$100 or less. Finished products can be sold without licensing and inspection. There isn't any system for certifying ceramics teachers, and there aren't any requirements that they be trained in the lethal possibilities of toxic glazes.

### Several Deaths

Over the past three years, there have been at least a half dozen deaths in the U.S. and Canada from pottery poisoning. All but one resulted from imported items or those made by independent craftsmen. (In the one attributable to a commercially manufactured product, a 17-month-old Philadelphia child died earlier this year from lead in a crock made by Mellox Pottery of Manhattan Beach, Calif. The Food and Drug Administration recalled two of the company's lines found to be unsafe. Mellox co-operated fully in the recall.)

After a two-year-old Montreal boy died recently from lead in a handmade pitcher bought in Nova Scotia, a group of doctors tested 264 pottery pieces bought at U.S. and Canadian handicraft and department stores. They reported in the New England Journal of Medicine that half "released sufficient lead to make them unfit for culinary use." Thirty of the 40 handcrafted dishes tested were "potentially" poisonous. Of 147 glazes "in use by schools, clubs, studios and potters," the doctors found 111 unsafe.

Efforts to detect the offending items have been limited so far. The FDA has detained 602 shipments of foreign pottery in the last two years and in July began spot checks of domestic manufacturers. But the agency says it can do little to monitor independent craftsmen. "It's too big a problem," says Benjamin Krinitz, head of the FDA's New York food section.

State and local governments agree and contend there are other, more pressing problems. "Nobody's come in sick, and the law says we don't have to test the stuff until there's a case," says a spokesman for New York City's Health Department. In California, a bill barring sale of pottery that doesn't meet certain standards was introduced this year. But it died in the Senate finance committee.

### No Simple Test

Another problem is that there isn't any simple way to test for lead in pottery. Field kits are only in the development stage and haven't been widely distributed. Tests in private laboratories cost up to \$20 for each item.

In an effort to reach independent craftsmen, the Lead Industries Association, a trade group, recently issued a 10-page booklet warning beginning potters to refrain "altogether from designing and firing cups, mugs or other food and beverage utensils." The association says a program is being developed for labeling of safe pottery sold in stores. And it says it is asking manufacturers of pre-mix hobby glazes to mark their products if they are safe for use with foods.

But it isn't known how effective such voluntary measures will be. For one thing, many glaze makers seem unwilling to put warning labels on their products. Jack D. Wolfe, a Brooklyn supplier, says "I've been selling glazes for 30 years and not one person has complained or gotten sick."

Meanwhile, a growing number of potters are becoming concerned about their products. Camille Billops, who lives and works in a big Manhattan loft, discovered only a year ago that her handwork might be hazardous. Like most potters who go to established schools, she was trained to make "stoneware" in a high temperature kiln. But when she set up her own

Please Turn to Page 31, Column 4

## Handicraft Hazards: Pottery Made at Home Can Be Very Harmful

Continued From First Page

shop, she bought a relatively inexpensive—and potentially dangerous—low temperature kiln.

It wasn't until she had given away several pieces that she learned certain glazes weren't safe when fired at low temperatures. A laboratory confirmed that her pots were poisonous. "I called everyone and told them to break those pots," she recalls. "They looked great on old oak tables, but I wasn't going to wait until somebody died before I did anything about it." Mrs. Billops has quit using lead glazes and inscribes "No Pb" on the back of her crockery. (Pb is the symbol for lead.)

Taking out the lead, however, may be even more dangerous than leaving it in. The Lead Industries Association says its research hasn't found any element that will "impart all of the desirable properties to a glaze that lead will—and do so with reasonable economy and complete safety when properly handled."

After she stopped using lead, Mrs. Billops took to rummaging among the piles of plastic boxes filled with red, blue and green powders in the corner of her loft, searching for a substitute. Much of what she found—compounds of chrome, cadmium, sodium, uranium and other metals—was listed among the most deadly elements in a weighty book called "Dangerous Properties of Industrial Metals."

She took one cup glazed with uranium oxide to the Atomic Energy Commission. It turned out to be radioactive. "They told me it was safe," she says, "unless it's ingested." Uranium oxide isn't on Mrs. Billops' shelves any more.

But if lead and uranium aren't safe, what is? Mrs. Billops and other potters are confused. Most research done so far on glazes has concentrated on mass-produced dinnerware. The Lead Industries Association admits "we don't have all the answers" about low temperature lead glazes used by amateurs. "As for low temperature leadless glazes," the trade group says, "it is still unknown whether these are safe for food contact surfaces."